ABSTRACT OF THE DISCLOSURE

Provided is a magnetic head having a magnetoresistive device which has high output and is best suited to high-recording-density magnetic recording/reading. A magnetic sensor having large output can be realized by providing a magnetic sensor which comprises: a first ferromagnetic film; a conductor which intersects the first ferromagnetic film via a first intermediate layer; a current circuit structure which is connected so as to cause a current to flow from the first ferromagnetic layer to the conductor; a second ferromagnetic film which is formed on the conductor in an intersecting manner via a second intermediate layer and which generates a signal of voltage changing according to a change in an external magnetic field; a voltage change amplifier film which contains materials whose resistance changes nonlinearly due to voltage; and an electrode which is connected to the voltage change amplifier film.